



Office of the Director  
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Maricopa.gov/AQ  
CleanAirMakeMore.com



June 24, 2021

Mr. Misael Cabrera  
Arizona Department of Environmental Quality (ADEQ)  
1110 W. Washington Street  
Phoenix, Arizona, 85007

RE: Submittal of RACT Certification of Maricopa County Air Quality Department (MCAQD) Rule 348

Mr. Cabrera:

As the designated U.S. Environmental Protection Agency (EPA) contact, the MCAQD hereby requests that ADEQ submit to the EPA for approval the enclosed Reasonably Available Control Technology (RACT) certification of MCAQD Rule 348 (Aerospace Manufacturing and Rework Operations) as meeting the Clean Air Act, Section 182 RACT requirements for the 2008 8-hour Ozone National Ambient Air Quality Standard (NAAQS) as it is currently written. The Maricopa County Board of Supervisors approved the RACT certification of Rule 348 and the submittal of the RACT Certification to the EPA at a public hearing on June 23, 2021.

The purpose of the enclosed RACT certification is to address the EPA's disapproval of the negative declaration for aerospace coating the MCAQD originally submitted in 2017 as part of the SIP Revision for the MCAQD Ozone Rules. The EPA finalized disapproval of MCAQD's negative declaration for aerospace coating on January 7, 2021 in the Federal Register (86 FR 971) and the disapproval became effective on February 8, 2021. Consequently, the MCAQD must submit the RACT certification which would correct the identified deficiency and submit such revision to ADEQ, and ADEQ must submit those revisions to the EPA not later than 18 months from the effective date of the EPA's final rule – not later than August 8, 2022.

In this submittal, the MCAQD is requesting that the EPA approve the RACT certification of Rule 348. The package includes all of the administrative materials and technical support materials specified in Appendix V to 40 CFR 51.

You may direct any questions to Kimberly Butler, Manager of the Planning & Analysis Division, at 602-506-6731 or [Kimberly.Butler@maricopa.gov](mailto:Kimberly.Butler@maricopa.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Philip A. McNeely".

Philip A. McNeely, R.G.  
Director

Enclosure

cc: Elizabeth Adams – [Adams.Elizabeth@epa.gov](mailto:Adams.Elizabeth@epa.gov), EPA  
Meredith Kurpius – [Kurpius.Meredith@epa.gov](mailto:Kurpius.Meredith@epa.gov), EPA  
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PAM/lj



Maricopa County Air Quality Department  
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## **MARICOPA COUNTY REASONABLY AVAILABLE CONTROL TECHNOLOGY (RACT) CERTIFICATION**

**June 2021**

**Reasonably Available Control Technology (RACT) Certification for Volatile  
Organic Compound (VOC) Emissions from Aerospace Manufacturing and  
Rework Operations in Maricopa County**

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## SECTION 1: INTRODUCTION

### 1.1 Purpose:

This reasonably available control technology (RACT) certification is being submitted to the U.S. Environmental Protection Agency (EPA) to certify that Maricopa County Air Quality Department's (MCAQD) Rule 348 (Aerospace Manufacturing and Rework Operations) meets RACT for aerospace operations.

### 1.2 Regulatory Background:

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On March 12, 2008, the EPA revised the National Ambient Air Quality Standard (NAAQS) for ozone. On May 21, 2012, the EPA designated Maricopa County as a nonattainment area with respect to the 2008 ozone NAAQS. The Maricopa County nonattainment area was originally classified as marginal nonattainment but was reclassified as a moderate nonattainment area on May 4, 2016. As a result of this reclassification, Maricopa County was required to implement RACT for all major sources of volatile organic compounds (VOC) and for each VOC source category for which the EPA has issued a Control Technique Guideline (CTG).

On December 19, 2016, on behalf of the MCAQD, the Arizona Department of Environmental Quality (ADEQ) submitted a State Implementation Plan (SIP) Revision for the Maricopa County Air Quality Department Ozone Rules Contained in the Arizona SIP. According to EPA, this submittal did not satisfactorily address the public notice requirements for the RACT SIP and negative declarations that were included in the submittal. The MCAQD subsequently satisfied the public notice requirements and on June 16, 2017 submitted a revised SIP submittal to the ADEQ. ADEQ submitted the revised SIP submittal to the EPA on June 22, 2017.

The revised submittal included a negative declaration for aerospace operations because the MCAQD originally determined that there were no aerospace manufacturing operations in Maricopa County that exceeded the applicability threshold recommended in the Aerospace CTG. In June of 2017, EPA requested additional information regarding aerospace manufacturing and rework operations in Maricopa County. Following this request, the MCAQD reevaluated the source category and determined that there are two facilities in Maricopa County where emissions from aerospace manufacturing and rework operations exceed 25 tons per year. These facilities were not identified in the initial evaluation because the majority of the emissions come from solvent cleaning and the application of adhesives (which are part of an aerospace manufacturing and rework operation), and these processes were not considered in the initial evaluation.

As a result of this information, the EPA proposed a disapproval of MCAQD's negative declaration for aerospace operations on September 18, 2020 (85 FR 58310) and finalized the disapproval on January 7, 2021. As a result of this disapproval, the MCAQD was required to evaluate Rule 348 to determine if it represents RACT for the 2008 Ozone Standard.

### 1.3 RACT Analysis:

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Rule 348 (Aerospace Manufacturing and Rework Operations) was adopted on April 7, 1999 to fulfill the RACT fix-up requirements that were imposed on Maricopa County when Congress enacted the Clean Air Act Amendments of 1990. Rule 348 was submitted to the

EPA and approved into the Arizona SIP on September 20, 1999. In their evaluation, EPA determined that Rule 348 was consistent with the CTG for Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace and Manufacturing Rework Operations (EPA-453/R-97-004, December 1997). Rule 348 was later revised on September 25, 2013 to update the definition of a volatile organic compound (VOC).

The MCAQD has evaluated Rule 348 and determined that it is consistent with the Aerospace CTG and is generally consistent with several other aerospace rules recently approved as RACT and, therefore, meets RACT for the 2008 ozone NAAQS.

The MCAQD identified two rules that are consistent with the Aerospace CTG that were recently approved by EPA as RACT for the 2008 ozone NAAQS:

- 326 Indiana Administrative Code (IAC) 8-21 (adopted 10/13/2011) was approved as RACT for the 2008 ozone NAAQS on 2/13/2019 (84 FR 3711).
- 30 Texas Administrative Code (TAC) 115.420-429 (amended 6/25/2015) was approved as RACT for the 2008 ozone NAAQS on 4/30/2019 (84 FR 18145).

The VOC limits in the Indiana and Texas rules are consistent with those in MCAQD's Rule 348 as well as the Aerospace CTG (see Table 1). In some cases, the VOC limits in Rule 348 are actually more stringent than those in the Indiana and Texas rules.

The MCAQD also identified two recently SIP-approved rules in California for further comparison:

- Eastern Kern Air Pollution Control District (EKAPCD) Rule 410.8 (adopted 3/13/2014) was approved into the California SIP on 5/17/2016 and is currently being reviewed for the 2008 ozone NAAQS RACT requirements.
- Mojave Desert Air Quality Management District (MDAQMD) Rule 1118 (adopted 10/26/2015) was approved as RACT for the 2008 ozone NAAQS on 6/21/2018 (82 FR 28240).

The VOC limits in Rule 348 are largely consistent with those in the Aerospace CTG and the California rules, with the exception of the coating categories documented below. There are 13 coating categories in MCAQD's Rule 348 that have more stringent VOC limits than those in one or both of the California rules. There are 16 coating categories where one or both of the California rules have more stringent VOC limits than Rule 348. The MCAQD conducted an analysis of data obtained through surveys and/or recent inspections of the county's five largest aerospace coating sources with provisions from Rule 348 in their permits to determine if any of the companies are using coatings in the 16 coating categories where California rules have more stringent limits and the VOC content of the coatings they are using in those categories. The MCAQD determined that these sources only use a few of these coatings and of those used, the majority were observed to have VOC contents that are lower than the California rules'. Based on the results of our analysis, the total VOC emissions from categories where California rules which have more stringent limits were found to be less than 0.5% of each facility's total VOC emissions.

Outside of California, the MCAQD did not find any rules approved as RACT that were more stringent than the Aerospace CTG and the aerospace maximum achievable control

technology (MACT) standard (60 FR 45948, 9/1/1995). Based on these findings, the MCAQD determined that the requirements in Rule 348 are still the presumptive RACT standard for aerospace coating and cleaning operations in Maricopa County.

The table below demonstrates that the VOC limits in Rule 348 are consistent with – or, in some cases, lower than - the VOC limits recommended in the CTG/MACT for Aerospace Manufacturing and Rework Operations. The table also compares these VOC limits to those in the Indiana, Texas, and California rules. All VOC limits are displayed as grams per liter and check marks (✓) indicate where limits are consistent with those in MCAQD's Rule 348.

**Table 1: Comparison of VOC Limits for RACT Analysis**

Coating Type	MCAQD Rule 348	CTG/MACT	Indiana	Texas	Eastern Kern (CA)	Mojave Desert (CA)
All Primers (except Specialty or General Aviation Rework Facility Primers)	350	✓	✓	✓	✓	✓
All Topcoats (except Specialty or General Aviation Rework Facility Topcoats)	420	✓	✓	✓	✓	340
General Aviation Rework Facility Primers	540	✓	✓	No Limit	350	350
General Aviation Rework Facility Topcoats	540	✓	✓	No Limit	420	340
Ablative Coating	600	✓	✓	✓	✓	✓
Adhesion Promoter	890	✓	✓	✓	850	850
Adhesive Bonding Primers: Cured at 250°F or below	850	✓	✓	✓	805	805
Adhesive Bonding Primers: Cured above 250°F	1030	✓	✓	✓	805	805
Adhesives: Commercial Interior	760	✓	✓	✓	✓	✓
Adhesives: Cyanoacrylate	1,020	✓	✓	✓	✓	✓
Adhesives: Fuel Tank	620	✓	✓	✓	✓	✓
Adhesives: Nonstructural	360	✓	✓	✓	250	250
Adhesives: Rocket Motor Bonding	890	✓	✓	✓	✓	✓
Adhesives: Rubber-based	850	✓	✓	✓	✓	✓
Adhesives: Structural Autoclavable	60	✓	✓	✓	50	50
Adhesives: Structural Nonautoclavable	850	✓	✓	✓	✓	700
Antichafe Coating	660	✓	✓	✓	600	420
Bearing Coating Compounds	620	✓	✓	✓	✓	✓
Caulking and Smoothing Compounds	850	✓	✓	✓	✓	✓
Chemical Agent-Resistant Coating	550	✓	✓	✓	✓	500
Clear Coating	720	✓	✓	✓	520	420
Commercial Exterior Aerodynamic Structure Primer	350	650	650	650	650	650
Compatible Substrate Primer	350	780	780	780	780	780

**Table 1: Comparison of VOC Limits for RACT Analysis**

Coating Type	MCAQD Rule 348	CTG/ MACT	Indiana	Texas	Eastern Kern (CA)	Mojave Desert (CA)
Corrosion Prevention Compound	710	✓	✓	✓	✓	✓
Cryogenic Flexible Primer	350	645	645	645	645	645
Cryoprotective Coating	600	✓	✓	✓	✓	✓
Coatings Related to Electromagnetism and/or Other Radiation Electric or Radiation-Effect Coating	600	800	800	800	800	800
Electrostatic Discharge and Electromagnetic Interference (EMI) Coating	800	✓	✓	✓	✓	✓
Elevated Temperature Skydrol Resistant Commercial Primer	350	740	740	740	740	740
Epoxy Polyamide Topcoat	420	660	660	660	660	660
Fire-Resistant (Interior) Coating	800	✓	✓	✓	650 - 800	650 - 800
Flexible Primer	350	640	640	640	640	640
Flight-Test Coatings: Missile or Single Use Aircraft	420	✓	✓	✓	✓	✓
Flight-Test Coatings: All Other	840	✓	✓	✓	✓	✓
Fuel-Tank Coating	720	✓	✓	✓	420 - 720	420 - 720
High-Temperature Coating	850	✓	✓	✓	✓	720
Insulation Covering	740	✓	✓	✓	✓	✓
Intermediate Release Coating	750	✓	✓	✓	✓	✓
Lacquer	830	✓	✓	✓	✓	✓
Maskant: Bonding Maskant	420	1,230	1,230	1,230	1,230	1,230
Maskant: Critical Use and Line Sealer Maskant	420	1,020	1,020	1,020	750	750
Maskant: Seal Coat Maskant	420	1,230	1,230	1,230	1,230	1,230
Metallized Epoxy Coating	740	✓	✓	✓	✓	700
Mold Release	780	✓	✓	✓	✓	✓
Optical Anti-Reflective Coating	750	✓	✓	✓	700	700
Part Marking Coating	850	✓	✓	✓	✓	✓
Pretreatment Coating	780	✓	✓	✓	✓	✓
Rain Erosion-Resistant Coating	420	850	850	850	800	600
Resin Surface Sealer	695	Not in CTG	No Limit	No Limit	600	✓
Rocket Motor Nozzle Coating	660	✓	✓	✓	✓	✓
Scale Inhibitor	880	✓	✓	✓	✓	✓
Screen Print Ink	840	✓	✓	✓	✓	✓
Sealants: Extrudable/Rollable/Brushable Sealant	240	280	280	280	280	280
Sealants: Sprayable Sealant	600	✓	✓	✓	✓	✓

**Table 1: Comparison of VOC Limits for RACT Analysis**

Coating Type	MCAQD Rule 348	CTG/ MACT	Indiana	Texas	Eastern Kern (CA)	Mojave Desert (CA)
Self-priming Topcoat	420	✓	420 - 540	✓	✓	✓
Silicone Insulation Material	850	✓	✓	✓	✓	✓
Solid Film Lubricant	880	✓	✓	✓	✓	✓
Specialized Function Coating	890	✓	✓	✓	✓	✓
Temporary Protective Coating	250	320	320	320	✓	✓
Thermal Control Coating	800	✓	✓	✓	✓	✓
Wet Fastener Installation Coating	675	✓	✓	✓	✓	✓
Wing Coating	420	850	✓	✓	750	750

In addition, the MCAQD rule is consistent with the CTG and RACT as demonstrated below:

- Rule 348, Section 302 allows the use of an emission control system as an alternative to meeting the VOC limits in Section 301 if the control system has a combined capture and control efficiency of at least 81% by weight. This is consistent with the Aerospace CTG and with rules approved as RACT for other ozone nonattainment areas (30 TAC 115.423, 326 IAC 8-21-6 and MDAQMD Rule 1118).
- Rule 348, Section 305 includes requirements for solvent cleaning operations that are part of an aerospace coating operation, including hand-wipe cleaning and flush cleaning. Rule 348, Section 306 includes requirements for cleaning spray guns. These requirements are consistent with the Aerospace CTG and with rules approved as RACT for other ozone nonattainment areas (30 TAC 115.422, 326 IAC 8-21-5 and MDAQMD Rule 1118).
- Rule 348, Section 307 includes VOC containment and disposal requirements (e.g. housekeeping measures). These requirements are consistent with the Aerospace CTG and with rules approved as RACT for other ozone nonattainment areas (30 TAC 115.422, 326 IAC 8-21-4 and MDAQMD Rule 1118).
- Rule 348, Section 308 includes exemptions that are consistent with the CTG and rules approved as RACT for other ozone nonattainment areas.
- Rule 348, Section 200 contains definitions that are generally consistent with the Aerospace CTG.

## SECTION 2: COMPLETENESS CRITERIA

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### 2.1 Administrative Materials:

#### 2.1(a) A formal letter of submittal from the MCAQD Director or [his] designee, requesting the EPA approval of the RACT certification.

*See* RACT certification submission cover letter from Philip A. McNeely, Director of the MCAQD, included above.

#### 2.1(b) Evidence that the MCAQD has obtained approval of the RACT certification.



The Maricopa County Board of Supervisors approved the RACT certification of Rule 348 on June 23, 2021.

*See* Appendix 3 of this document.

**2.1(c) Evidence that the MCAQD has the necessary legal authority under State law to submit the RACT certification.**

*See* Appendix 5 of this document for copies of Arizona Revised Statutes (A.R.S.) §§ 49-112, 49-474, and 49-479 which authorize the MCAQD to submit the RACT certification of Rule 348.

**2.1(d) A copy of the actual regulations or documents submitted for RACT certification.**

*See* Appendix 4 of this document for a copy of Rule 348.

**2.1(e) Evidence that the MCAQD followed all the procedural requirements of the State's laws and constitution in conducting and completing the adoption/issuance of the RACT certification.**

The MCAQD completed all the following procedural requirements for obtaining approval of the RACT SIP certification of Rule 348:

- (1) Posted a Notice of Proposed RACT Certification on the Maricopa County Enhanced Regulatory Outreach Program (EROP) website on April 7, 2021 which provided the public at least 30 days to comment on the proposed RACT certification;
- (2) Provided the public at least 30 days to comment on the proposed RACT certification of Rule 348 submittal prior to the public hearing (BOS Public Hearing Notice and Newspaper Affidavit);
- (3) Obtained approval of the RACT certification of Rule 348 and approval to submit the certification to the EPA from the Board of Supervisors (Certified Minutes of BOS Public Hearing June 23, 2021).

*See* Appendices 1, 2 and 3.

**2.1(f) Evidence that public notice was given of the proposed RACT certification consistent with procedures approved by the EPA, including the date of publication of such notice.**

*See* Appendix 2 for evidence that the MCAQD gave public notice of the proposed RACT certification of Rule 348, including the dates of publication of such notices.

**2.1(g) Certification that public hearing(s) were held in accordance with the information provided in the public notice and the State's laws and constitution, if applicable and consistent with the public hearing requirements in 40 CFR 51.102.**

*See* Appendices 2 and 3.

**2.1(h) Compilation of public comments and the MCAQD's response.**

No public comments were received.

**2.2 Technical Support:**

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**2.2(a) Identification of all regulated pollutant(s) affected by the RACT certification.**

The regulated pollutant affected by this certification is volatile organic compounds (VOC).

**2.2(b) Identification of the locations of affected sources including the EPA attainment/nonattainment designation of the locations and the status of the attainment plan for the affected area(s).**

Rule 348 is applicable to all areas and sources under the MCAQD's jurisdiction.

EPA attainment/nonattainment designations for all or parts of Maricopa County are:

1987 PM <sub>10</sub> Standard:	Serious Nonattainment (June 10, 1996)
2008 Ozone Standard:	Moderate Nonattainment (May 4, 2016)
2015 Ozone Standard:	Marginal Nonattainment (June 4, 2018)
1971 Carbon Monoxide Standard:	Attainment (April 8, 2005)
2008 Lead Standard:	Unclassified/Attainment (December 31, 2011)
2010 Nitrogen Oxides Standard:	Unclassified/Attainment (January 31, 2012)
2010 Sulfur Dioxide Standard:	Unclassified/Attainment (April 19, 2018)
2012 PM <sub>2.5</sub> Standard:	Unclassified/Attainment (April 15, 2015)

The status of attainment plans for Maricopa County are:

2012 Five Percent Plan:	Approved (June 10, 2014)
2017 MAG Ozone Moderate Plan:	Partial Approval (July 2, 2020)

**2.2(c) Quantification of the changes in plan allowable emissions from the affected sources; estimates of changes in current actual emissions from affected sources or, where appropriate, quantification of changes in actual emissions from affected sources through calculations of the differences between certain baseline levels and allowable emissions anticipated as a result of the revision.**

Not applicable

**2.2(d) The MCAQD's demonstration that the national ambient air quality standards, prevention of significant deterioration increments, reasonable further progress demonstration, and visibility, as applicable, are protected if the plan is approved and implemented.**

Not applicable

**2.2(e) Modeling information required to support the proposed revision, including input data, output data, models used, justification of model selections,**

ambient monitoring data used, meteorological data used, justification for use of offsite data (where used), modes of models used, assumptions, and other information relevant to the determination of adequacy of the modeling analysis.

Not applicable

- 2.2(f) Evidence, where necessary, that emission limitations are based on continuous emission reduction technology.**

Not applicable

- 2.2(g) Evidence that the plan contains emission limitations, work practice standards and recordkeeping/reporting requirements, where necessary, to ensure emission levels.**

Not applicable

- 2.2(h) Compliance/enforcement strategies, including how compliance will be determined in practice.**

Not applicable

- 2.2(i) Special economic and technological justifications required by any applicable EPA policies, or an explanation of why such justifications are not necessary.**

Not applicable

**APPENDIX 1:  
NOTICE OF PROPOSED RACT CERTIFICATION AND NOTICE OF AVAILABILITY**



## Enhanced Regulatory Outreach Program Maricopa County Air Quality Department

### **Notice of Proposed RACT Certification of Rule 348: Aerospace Manufacturing and Rework Operations**

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The Maricopa County Air Quality Department (MCAQD) is proposing to certify that Rule 348 (Aerospace Manufacturing and Rework Operations) meets the Clean Air Act Section 182 Reasonably Available Control Technology (RACT) requirements for the 2008 8-hour ozone National Ambient Air Quality Standard as it is currently written and implemented within Maricopa County. The RACT Certification for Rule 348 is attached to this document. The MCAQD is not proposing any changes to Rule 348.

The RACT Certification was posted on the Maricopa County Enhanced Regulatory Outreach Program (EROP) website on Wednesday, April 7, 2021. Written comments on this RACT Certification may be submitted through the EROP website at: <http://maricopa.gov/FormCenter/Regulatory-Outreach-17/Citizen-Comments-94>. Please provide written comments by Friday, May 7, 2021.

MCAQD will take reasonable measures to provide access to department services to individuals with limited ability to speak, write, or understand English and/or to those with disabilities. Requests for language interpretation services or for disability accommodations must be made at least 48 hours in advance by contacting: 602-506-6443.

MCAQD tomará las medidas necesarias para brindar acceso a los servicios del departamento a personas que no dominan el idioma inglés y/o personas con discapacidades. Las solicitudes de servicios de interpretación de otro idioma o adaptaciones para discapacitados deben realizarse con al menos 48 horas de anticipación comunicándose con: 602-506-6443.

PNI-Arizona Business Gazette

**AFFIDAVIT OF PUBLICATION**

**MC AIR QUALITY DIV  
3800 N CENTRAL AVE SUITE 1400  
PHOENIX, AZ 85012**

**NOTICE OF PROPOSED RACT  
CERTIFICATION FOR  
MARICOPA COUNTY AIR  
POLLUTION CONTROL  
REGULATIONS**

The Maricopa County Air Quality Department (MCAQD) posted a Notice of Proposed RACT (Reasonably Available Control Technology) Certification on the Maricopa County Enhanced Regulatory Outreach Program website at <http://www.maricopa.gov/3536/Active-Regulatory-Process> regarding the proposed certification of Rule 348 (Aerospace Manufacturing and Rework Operations) as meeting RACT. The MCAQD is not proposing any changes to Rule 348. MCAQD will take reasonable measures to provide access to department services to individuals with limited ability to speak, write, or understand English and/or to those with disabilities. Requests for language interpretation services or for disability accommodations must be made at least 48 hours in advance by contacting: 602-506-6443. MCAQD tomará las medidas necesarias para brindar acceso a los servicios del departamento a personas que no dominan el idioma inglés y/o personas con discapacidades. Las solicitudes de servicios de interpretación de otro idioma o adaptaciones para discapacitados deben realizarse con al menos 48 horas de anticipación comunicándose con: 602-506-6443.

Pub: April 8, 15, 2021

Order # 0004674138 # of Affidavits 1

P.O #

Published Date(s):

04/08/21, 04/15/21


**STATE OF WISCONSIN } SS.  
COUNTY OF BROWN }**

I, being first duly sworn, upon oath deposes and says: That I am the legal clerk of the Arizona Republic, a newspaper of general circulation in the counties of Maricopa, Coconino, Pima and Pinal, in the State of Arizona, published weekly at Phoenix, Arizona, and that the copy hereto attached is a true copy of the advertisement published in the said paper on the dates indicated.



Sworn to before me this

15 TH day of  
APRIL 2021



Notary Public

My Commission expires: 10/23/2023

PANG PAPPATHOPOULOS  
Notary Public  
State of Wisconsin

**APPENDIX 2:  
NOTICE OF PUBLIC HEARING AND  
AFFIDAVIT OF PUBLICATION OF PUBLIC HEARING NOTICE**



**Enhanced Regulatory Outreach Program  
Maricopa County Air Quality Department**

**Notice of Public Hearing  
RACT Certification of Rule 348  
(Aerospace Manufacturing and Rework Operations)**

**Date/Time: Wednesday, June 23, 2021 at 9:30 a.m.**

**Location: Board of Supervisors' Auditorium  
205 W. Jefferson St., Phoenix, Arizona\***

The Maricopa County Board of Supervisors is scheduled to conduct a public hearing to solicit comments on the proposed certification of Maricopa County Air Pollution Control Regulation III - Rule 348 (Aerospace Manufacturing and Rework Operations) as meeting the Clean Air Act, Section 182 Reasonably Available Control Technology (RACT) requirements for the 2008 8-hour Ozone National Ambient Air Quality Standard (NAAQS) as it is currently written and the proposed submission of this RACT Certification to the U.S. Environmental Protection Agency (EPA). The Maricopa County Air Quality Department (MCAQD) is not proposing any changes to Rule 348.

You may comment on the proposed RACT Certification of Rule 348 at:

[www.maricopa.gov/FormCenter/Regulatory-Outreach-17/Citizen-Comments-94](http://www.maricopa.gov/FormCenter/Regulatory-Outreach-17/Citizen-Comments-94).

Maricopa County is currently classified as a moderate nonattainment area by the EPA with respect to the 2008 8-hour NAAQS for Ozone. As such, Maricopa County is required to implement RACT for all major sources of volatile organic compounds (VOC) and for each VOC source category for which the EPA has issued a Control Technique Guideline (CTG). In 2017, a State Implementation Plan Revision for the Maricopa County Air Quality Department Ozone Rules was submitted to the EPA by the Arizona Department of Environmental Quality, which included a negative declaration for the CTG source category of aerospace coating.

After the EPA requested additional information, the MCAQD reevaluated the source category and determined that there are facilities in Maricopa County where emissions from aerospace coating operations exceed the emissions threshold in the Aerospace CTG. As a result, the EPA disapproved MCAQD's negative declaration for aerospace coating and required the MCAQD to evaluate Rule 348 to determine if it represents RACT for the 2008 8-hour Ozone NAAQS. The MCAQD evaluated Rule 348 and determined that it is consistent with the Aerospace CTG and is generally consistent with several other aerospace coating rules recently approved as RACT and, therefore, meets RACT for the 2008 8-hour Ozone NAAQS and no changes to the current version of Rule 348 are required. The MCAQD will continue with the version approved on September 25, 2013.

For more information regarding this RACT Certification, please refer to the Report to the Board of Supervisors attached to this notice and available at: [www.maricopa.gov/3536/Active-Regulatory-Process](http://www.maricopa.gov/3536/Active-Regulatory-Process). Copies of the Report to the Board of Supervisors and the RACT Certification will also be available at least 30 days prior to the hearing for public inspection. Please call 602-506-6010 to request these copies or click on the following link to view it:  
[www.maricopa.gov/DocumentCenter/Index/2951](http://www.maricopa.gov/DocumentCenter/Index/2951).



MCAQD will take reasonable measures to provide access to department services to individuals with limited ability to speak, write, or understand English and/or to those with disabilities. Requests for language interpretation services or for disability accommodations must be made at least 48 hours in advance by contacting: 602-506-6443.

MCAQD tomará las medidas necesarias para brindar acceso a los servicios del departamento a personas que no dominan el idioma inglés y/o personas con discapacidades. Las solicitudes de servicios de interpretación de otro idioma o adaptaciones para discapacitados deben realizarse con al menos 48 horas de anticipación comunicándose con: 602-506-6443.

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MC AIR QUALITY DIV  
3800 N CENTRAL AVE SUITE 1400  
PHOENIX, AZ 85012

JUN 03 2021

MARICOPA COUNTY  
AIR QUALITY DEPARTMENT

Order # 0004737921 # of Affidavits 1

P.O # Rule 348

Published Date(s):

05/20/21, 05/27/21

STATE OF WISCONSIN } SS.  
COUNTY OF BROWN }

I, being first duly sworn, upon oath deposes and says: That I am the legal clerk of the Arizona Republic, a newspaper of general circulation in the counties of Maricopa, Coconino, Pima and Pinal, in the State of Arizona, published weekly at Phoenix, Arizona, and that the copy hereto attached is a true copy of the advertisement published in the said paper on the dates indicated.

Sworn to before me this

27 TH day of  
MAY 2021

Notary Public

My Commission expires:

VICKY FELTY  
Notary Public  
State of Wisconsin

NOTICE OF PUBLIC HEARING FOR  
THE RACT CERTIFICATION OF A  
MARICOPA COUNTY  
AIR POLLUTION CONTROL  
REGULATION

NOTICE IS HEREBY GIVEN that the Maricopa County Board of Supervisors will conduct a public hearing on June 23, 2021 at 9:30 a.m. to solicit comments on the proposed certification of Maricopa County Air Pollution Control Regulation III - Rule 348 (Aerospace Manufacturing and Rework Operations) as meeting the Clean Air Act Section 182 Reasonably Available Control Technology (RACT) requirements for the 2008 8-hour Ozone National Ambient Air Quality Standard as it is currently written and the proposed submission of this RACT Certification to the U.S. Environmental Protection Agency. The MCAQD (Maricopa County Air Quality Department) is not proposing any changes to Rule 348.

As of the publishing date of this notice, all Board of Supervisors' meetings are being held online. Please check the Board of Supervisors' website at least 24 hours before the date of the public hearing at <https://www.maricopa.gov/324/Board-of-Supervisors-Meeting-Information> to verify if the meeting is only being held online or if in-person attendance is permitted. Directions for remote access to the meeting will be available on the website at least 24 hours before the hearing.

For more information regarding this RACT Certification, please refer to the Report to the Board of Supervisors, available at <http://www.maricopa.gov/3536/Active-Regulatory-Process>. A copy of the RACT Certification SIP submittal will be available at least 30 days prior to the hearing for public inspection. Please call 602-506-6010 to request these copies or view them using the following link: <https://www.maricopa.gov/DocumentCenter/Index/2951>.

MCAQD will take reasonable measures to provide access to department services to individuals with limited ability to speak, write, or understand English and/or to those with disabilities. Requests for language interpretation services or for disability accommodations must be made at least 48 hours in advance by contacting: 602-506-6443.

MCAQD tomará las medidas necesarias para brindar acceso a los servicios del departamento a personas que no dominan el idioma inglés y/o personas con discapacidades. Las solicitudes de servicios de interpretación de otro idioma o adaptaciones para discapacitados deben realizarse con al menos 48 horas de anticipación comunicándose con: 602-506-6443.

Pub: May 20, 27, 2021

**APPENDIX 3:  
BOARD OF SUPERVISORS' APPROVAL**

# COUNTY OF MARICOPA

State of Arizona

## Office of the Clerk

Board of Supervisors

State of Arizona ) ss.  
County of Maricopa )

*I, Juanita Garza, Clerk of the Board of Supervisors, do hereby certify that the following is a true and correct statement of the agenda item and the action taken by the Board of Supervisors at their meeting held on June 23, 2021.*

**9. RULE 348 (AEROSPACE MANUFACTURING AND REWORK OPERATIONS) RACT CERTIFICATION**

Convene a public hearing, as required by Arizona Revised Statutes (A.R.S.) § 49-474(4), to solicit comments on the proposed certification of Maricopa County Air Pollution Control Regulation III - Rule 348 (Aerospace Manufacturing and Rework Operations) as meeting the Clean Air Act, Section 182 Reasonably Available Control Technology (RACT) requirements for the 2008 8-hour Ozone National Ambient Air Quality Standard (NAAQS) as it is currently written, and the proposed submission of this RACT Certification to the U.S. Environmental Protection Agency (EPA). The Maricopa County Air Quality Department (MCAQD) is not proposing any changes to Rule 348. Following the public hearing, the Board is requested to approve the proposed RACT Certification of Rule 348 and to approve submission of the RACT Certification to the EPA.

Maricopa County is currently classified as a moderate nonattainment area by the EPA with respect to the 2008 NAAQS for Ozone. As such, Maricopa County is required to implement RACT for all major sources of volatile organic compounds (VOC) and for each VOC source category for which the EPA has issued a Control Technique Guideline (CTG). In 2017, a State Implementation Plan Revision for the Maricopa County Air Quality Department Ozone Rules was submitted to the EPA by the Arizona Department of Environmental Quality, which included a negative declaration for the CTG source category of aerospace coating. After the EPA requested additional information, the MCAQD reevaluated the source category and determined that there are facilities in Maricopa County where emissions from aerospace coating operations exceed the emissions threshold in the Aerospace CTG. As a result, the EPA disapproved MCAQD's negative declaration for aerospace coating and required the MCAQD to evaluate Rule 348 to determine if it represents RACT for the 2008 8-hour Ozone NAAQS. The MCAQD evaluated Rule 348 and determined that it is consistent with the Aerospace CTG and is generally consistent with several other aerospace coating rules recently approved as RACT and, therefore, meets RACT for the 2008 Ozone NAAQS and no changes to the current version of Rule 348 are required. The MCAQD will continue with the version approved on September 25, 2013. (C-85-21-043-X-01)

Motion to approve by Supervisor Steve Chucuri, seconded by Supervisor Steve Gallardo

Ayes: Jack Sellers, Bill Gates, Steve Chucuri, Clint Hickman, Steve Gallardo



*IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Official Seal of the County of Maricopa. Done at Phoenix, the County Seat, on June 23, 2021.*

*Juanita Garza*

*Clerk of the Board of Supervisors*

**APPENDIX 4:**  
**Rule 348 (Adopted September 25, 2013)**

**MARICOPA COUNTY  
AIR POLLUTION CONTROL REGULATIONS  
REGULATION III – CONTROL OF AIR CONTAMINANTS**

**RULE 348  
AEROSPACE MANUFACTURING AND REWORK OPERATIONS**

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**MARICOPA COUNTY  
AIR POLLUTION CONTROL REGULATIONS  
REGULATION III – CONTROL OF AIR CONTAMINANTS**

**RULE 348  
AEROSPACE MANUFACTURING AND REWORK OPERATIONS**

**SECTION 100 – GENERAL**

- 101 PURPOSE:** To limit the emission of volatile organic compounds (VOCs) from the manufacture and rework of aerospace vehicles and their components.
- 102 APPLICABILITY:** This rule applies to the manufacture or rework of commercial, civil, or military aerospace vehicles. This rule does not apply to research and development, quality control, laboratory testing, electronic parts and assemblies (except for cleaning and coating of completed assemblies) and to rework operations performed on antique aerospace vehicles or components or space vehicles.

**SECTION 200 – DEFINITIONS:** For the purpose of this rule, the following definitions shall apply, in addition to those definitions found in Rule 100 (General Provisions and Definitions) of these rules. In the event of any inconsistency between any of the Maricopa County Air Pollution Control Rules, the definitions in this rule take precedence.

- 201 ABLATIVE COATING:** A coating that chars when exposed to open flame or extreme temperatures, as would occur during the failure of an engine casing or during aerodynamic heating. The ablative char surface serves as an insulative barrier, protecting adjacent components from the heat or open flame.
- 202 ADHESION PROMOTER:** A very thin coating applied to a substrate to promote wetting and form a chemical bond with the subsequently applied material.
- 203 ADHESIVE BONDING PRIMER:** A primer applied in a thin film to aerospace components for the purpose of corrosion inhibition and increased adhesive bond strength by attachment. There are two categories of adhesive bonding primers, primers with a design cure at 250°F or below and primers with a design cure above 250°F.
- 204 AEROSOL COATING:** A hand-held, pressurized, nonrefillable container that expels an adhesive or a coating in a finely divided spray when a valve on the container is depressed.
- 205 AEROSPACE VEHICLE OR COMPONENT:** Any fabricated part, processed part, assembly of parts, or completed unit, with the exception of electronic components, of any

aircraft, including but not limited to airplanes, helicopters, missiles, rockets, and space vehicles.

- 206    **AIRCRAFT FLUID SYSTEMS:** Those systems that handle hydraulic fluids, fuel, cooling fluids, or oils.
- 207    **AIRCRAFT TRANSPARENCY:** The aircraft windshield, canopy, passenger windows, lenses and other components which are constructed of transparent materials.
- 208    **ANTICHAFF COATING:** A coating applied to areas of moving aerospace components that may rub during normal operations or installation.
- 209    **ANTIQUE AEROSPACE VEHICLE OR COMPONENT:** An antique aircraft, as defined by 14 CFR Part 45, or components thereof. An antique aerospace vehicle would not routinely be in commercial or military service in the capacity for which it was designed.
- 210    **AQUEOUS CLEANING SOLVENT:** A solvent in which water is at least 80 percent of the solvent as applied.
- 211    **BONDING MASKANT:** A temporary coating used to protect selected areas of aerospace parts from strong acid or alkaline solutions during processing for bonding.
- 212    **CHEMICAL AGENT-RESISTANT COATING (CARC):** An exterior topcoat designed to withstand exposure to chemical warfare agents or the decontaminates used in these agents.
- 213    **CHEMICAL MILLING MASKANT:** A coating that is applied directly to aluminum components to protect surface areas when chemical milling the component with a Type I or II etchant. This does not include bonding maskants, line sealers, and critical use and seal coat maskants. Additionally, maskants that must be used on an individual part or subassembly with a combination of Type I or II etchants and any of the above types of maskants (e.g., bonding, line sealers, and critical use and seal coat) are not included. Maskants that are defined as specialty coatings are not included under this definition.
- 214    **CLEANING OPERATION:** Any operation that removes dirt or impurities from aerospace vehicles, components, or coating equipment. This may include spray gun, hand-wipe, and flush cleaning operations.
- 215    **CLEANING SOLVENT:** A liquid material used for hand-wipe, spray gun, or flush cleaning. This definition excludes solutions that contain VOCs at a concentration less than 0.1% for carcinogenic VOCs or 1.0% for noncarcinogenic VOCs, as determined from manufacturers' representations.

- 216 **CLEAR COATING:** A transparent coating usually applied over a colored opaque coating, metallic substrate, or placard to give improved gloss and protection to the color coat. In some cases, a clearcoat refers to any transparent coating without regard to substrate.
- 217 **CLOSED-CYCLE DEPAINTING SYSTEM:** A dust free, automated process that removes permanent coating in small sections at a time, and maintains a continuous vacuum around the area(s) being depainted to capture emissions.
- 218 **COATING:** A material that is applied to the surface of an aerospace vehicle or component to form a decorative or functional solid film, or the solid film itself.
- 219 **COATING OPERATION:** Using a spray booth, tank, or other enclosure or any area, such as a hangar, for applying a single type of coating (e.g., primer); using the same spray booth for applying another type of coating (e.g., topcoat) constitutes a separate coating operation for which compliance determinations are performed separately.
- 220 **COATING UNIT:** A series of one or more coating applicators and any associated drying area and/or oven wherein a coating is applied, dried, and/or cured. A coating unit ends at the point where the coating is dried or cured, or prior to any subsequent application of a different coating. It is not necessary to have an oven or flashoff area to be included in this definition.
- 221 **COMMERCIAL EXTERIOR AERODYNAMIC STRUCTURE PRIMER:** A primer used on aerodynamic components and structures that protrude from the fuselage, such as wings and attached components, control surfaces, horizontal stabilizers, vertical fins, wing-to-body fairings, antennae, and landing gear and doors, for the purpose of extended corrosion protection and enhanced adhesion.
- 222 **COMMERCIAL INTERIOR ADHESIVE:** Materials used in the bonding of passenger cabin interior components. These components must meet the FAA fireworthiness requirements.
- 223 **COMPATIBLE SUBSTRATE PRIMER:** Either compatible Epoxy Primer or Adhesive Primer. Compatible Epoxy Primer is primer that is compatible with the filled elastomeric coating and is epoxy based. The compatible substrate primer is an epoxy-polyamide primer used to promote adhesion of elastomeric coatings such as impact-resistant coatings. Adhesive Primer is a coating that (1) inhibits corrosion and serves as a primer applied to bare metal surfaces or prior to adhesive application, or (2) is applied to surfaces that can be expected to contain fuel. Fuel tank coatings are excluded from this category.
- 224 **CONFINED SPACE:** A space that (1) is large enough and so configured that an employee can bodily enter and perform assigned work; (2) is limited or restricted for entry or exit (for example, fuel tanks, fuel vessels, and other spaces that have limited entry); and (3) is not suitable for continuous employee occupancy.

- 225    **CORROSION PREVENTION SYSTEM:** A coating system that provides corrosion protection by displacing water and penetrating mating surfaces, forming a protective barrier between the metal surface and moisture. Coatings containing oils or waxes are excluded from this category.
- 226    **CRITICAL USE AND LINE SEALER MASKANT:** A temporary coating, not covered under other maskant categories, used to protect selected areas of aerospace parts from strong acid or alkaline solutions such as those used in anodizing, plating, chemical milling and processing of magnesium, titanium, or high strength steel, high precision aluminum chemical milling of deep cuts, and aluminum chemical milling of complex shapes. Materials used for repairs or to bridge gaps left by scribing operations (i.e., line sealer) are also included in this category.
- 227    **CRYOGENIC FLEXIBLE PRIMER:** A primer designed to provide corrosion resistance, flexibility, and adhesion of subsequent coating systems when exposed to loads up to and surpassing the yield point of the substrate at cryogenic temperatures (-275°F and below).
- 228    **CRYOPROTECTIVE COATING:** A coating that insulates cryogenic or subcooled surfaces to limit propellant boil-off, maintain structural integrity of metallic structures during ascent or re-entry, and prevent ice formation.
- 229    **CYANOACRYLATE ADHESIVE:** A fast-setting, single component adhesive that cures at room temperature. Also known as "super glue."
- 230    **ELECTRIC OR RADIATION-EFFECT COATING:** A coating or coating system engineered to interact, through absorption or reflection, with specific regions of the electromagnetic energy spectrum, such as the ultraviolet, visible, infrared, or microwave regions. Uses include, but are not limited to, lightning strike protection, electromagnetic pulse (EMP) protection, and radar avoidance. Coatings that have been designated "classified" by the Department of Defense are exempt.
- 231    **ELECTROSTATIC DISCHARGE AND ELECTROMAGNETIC INTERFERENCE (EMI) COATING:** A coating applied to space vehicles, missiles, aircraft radomes, and helicopter blades to disperse static energy or reduce electromagnetic interference.
- 232    **ELEVATED TEMPERATURE SKYDROL RESISTANT COMMERCIAL PRIMER:** A primer applied primarily to commercial aircraft (or commercial aircraft adapted for military use) that must withstand immersion in phosphate-ester (PE) hydraulic fluid (Skydrol 500b or equivalent) at the elevated temperature of 150°F for 1,000 hours.
- 233    **EMISSION CONTROL SYSTEM (ECS):** A system, approved in writing by the Control Officer, designed and operated in accordance with good engineering practice to reduce

emissions of volatile organic compounds. Such system consists of an emissions collection subsystem and an emissions processing subsystem.

- 234 EPOXY POLYAMIDE TOPCOAT:** A coating used where harder films are required or in some areas where engraving is accomplished in camouflage colors.
- 235 FIRE-RESISTANT (INTERIOR) COATING:** A coating applied to the interior cabin of an airplane that prevents the interior cabin from being easily ignited and from burning with extreme rapidity.
- 236 FLEXIBLE PRIMER:** A primer that meets flexibility requirements such as those needed for adhesive bond primed fastener heads or on surfaces expected to contain fuel.
- 237 FLIGHT TEST COATING:** A coating applied to aircraft other than missiles or single-use aircraft prior to flight testing to protect the aircraft from corrosion and to provide required marking during flight test evaluation.
- 238 FLUSH CLEANING:** Removal of contaminants such as dirt, grease, oil, and coatings from an aerospace vehicle or component or coating equipment by passing solvent over, into, or through the item being cleaned. The solvent simply may be poured into the item being cleaned and then drained or assisted by air or hydraulic pressure or by pumping. Hand-wipe cleaning operations where wiping, scrubbing, mopping or other hand action are used are not included.
- 239 FUEL TANK ADHESIVE:** An adhesive used to bond components exposed to fuel and must be compatible with fuel tank coatings.
- 240 FUEL TANK COATING:** A coating applied to fuel tank components for the purpose of corrosion and/or bacterial growth inhibition and to assure sealant adhesion in extreme environmental conditions.
- 241 GENERAL AVIATION (GA):** The segment of civil aviation that encompasses all facets of aviation except air carriers, commuters and military. General aviation includes charter and corporate-executive transportation, instruction, rental, aerial application, aerial observation, business, pleasure and other special uses.
- 242 GENERAL AVIATION REWORK FACILITY:** Any aerospace facility with the majority of its revenues resulting from the reconstruction, repair, maintenance, repainting, conversion, or alteration of general aviation aerospace vehicles or components.
- 243 GRAMS PER LITER VOC:** A weight of VOC per combined volume of VOC and coating solids, less water and exempt compounds, and can be calculated by the following equation:

$$\text{grams per liter} = \frac{W_s - W_w - W_{es}}{V_s - V_w - V_{es}}$$

Where:

$W_s$  = weight of volatile organic compounds in grams

$W_w$  = weight of water in grams

$W_{es}$  = weight of exempt compounds in grams

$V_s$  = volume of material in liters

$V_w$  = volume of water in liters

$V_{es}$  = volume of exempt compounds in liters

- 244 **HAND-WIPE CLEANING OPERATION:** Removing contaminants such as dirt, grease, oil, and coatings from an aerospace vehicle or component by physically rubbing it with a material such as a rag, paper, or cotton swab that has been moistened with a cleaning solvent. This definition excludes the use of rags or other material used only to dry excess solvent from a part or product after removal from a vat or any other solvent bath.
- 245 **HIGH TEMPERATURE COATING:** A coating designed to withstand temperatures of more than 350°F.
- 246 **HIGH VOLUME LOW PRESSURE (HVLP) SPRAY EQUIPMENT:** Spray equipment that is used to apply coating by a spray gun that operates at 10.0 psig of atomizing air pressure or less at the air cap.
- 247 **INSULATION COVERING:** Material that is applied to foam insulation to protect the insulation from mechanical or environmental damage.
- 248 **INTERMEDIATE RELEASE COATING:** A thin coating applied beneath topcoats to assist in removing the topcoat in depainting operations and generally to allow the use of less hazardous depainting methods.
- 249 **LACQUER:** A clear or pigmented coating formulated with a nitrocellulose or synthetic resin to dry by evaporation without a chemical reaction. Lacquers are resolvable in their original solvent.
- 250 **LEAK:** A liquid that is allowed to seep or drip or to otherwise enter or escape in either of the following ways:
- a. Three or more drops, including misting and clouding; or

- b. A puddle greater than one square inch.
- 251 **LIMITED ACCESS SPACE:** Internal surfaces or passages of an aerospace vehicle or component that cannot be reached without the aid of an airbrush or a spray gun extension for the application of coatings.
- 252 **METALIZED EPOXY COATING:** A coating that contains relatively large quantities of metallic pigmentation for appearance and/or added protection.
- 253 **MOLD RELEASE:** A coating applied to a mold surface to prevent the molded piece from sticking to the mold as it is removed.
- 254 **NONSTRUCTURAL ADHESIVE:** An adhesive that bonds nonload bearing aerospace components in noncritical applications and is not covered in any other specialty adhesive categories.
- 255 **OPERATING PARAMETER VALUE:** A minimum or maximum value established for a control equipment or process parameter that, if achieved by itself or in combination with one or more other operating parameter values, determines that an owner or operator has complied with an applicable emission limitation.
- 256 **OPTICAL ANTI-REFLECTION COATING:** A coating with a low reflectance in the infrared and visible wavelength ranges that is used for antireflection on or near optical and laser hardware.
- 257 **PART MARKING COATING:** Coatings or inks used to make identifying markings on materials, components, and/or assemblies. These markings may be either permanent or temporary.
- 258 **PRETREATMENT COATING:** An organic coating that contains at least 0.5 percent acids by weight and is applied directly to metal surfaces to provide surface etching, corrosion resistance, adhesion, and ease of stripping.
- 259 **PRIMER:** The first layer and any subsequent layers of identically formulated coating applied to the surface of an aerospace vehicle or component. Primers are typically used for corrosion prevention, protection from the environment, functional fluid resistance, and adhesion of subsequent coatings. Primers that are defined as specialty coatings are not included under this definition.
- 260 **RADOME:** The nonmetallic protective housing for electromagnetic transmitters and receivers (e.g., radar, electronic countermeasures, etc.).



- 261     **RAIN EROSION-RESISTANT COATING:** A coating or coating system used to protect the leading edges of parts such as flaps, stabilizers, radomes, engine inlet nacelles, etc. against erosion caused by rain impact during flight.
- 262     **RESEARCH AND DEVELOPMENT:** An operation whose primary purpose is for research and development of new processes and products and that is conducted under the close supervision of technically trained personnel and is not involved in the manufacture of final or intermediate products for commercial purposes, except in a de minimis manner.
- 263     **RESIN SURFACE SEALER:** A coating designed or intended to seal the pores of high porosity cast surfaces of aerospace components composed of magnesium, aluminum or their alloys to prevent corrosion.
- 264     **ROCKET MOTOR BONDING ADHESIVE:** An adhesive used in rocket motor bonding applications.
- 265     **ROCKET MOTOR NOZZLE COATING:** A catalyzed epoxy coating system used in elevated temperature applications on rocket motor nozzles.
- 266     **RUBBER-BASED ADHESIVE:** A quick setting contact cement that provides a strong, yet flexible bond between two mating surfaces that may be of dissimilar materials.
- 267     **SCALE INHIBITOR:** A coating that is applied to the surface of a part prior to thermal processing to inhibit the formation of scale.
- 268     **SCREEN PRINT INK:** Inks used in screen printing processes during fabrication of decorative laminates and decals.
- 269     **SEAL COAT MASKANT:** An overcoat applied over a maskant to improve abrasion and chemical resistance during production operations.
- 270     **SEALANT:** A material used to prevent the intrusion of water, fuel, air, or other liquids or solids from certain areas of aerospace vehicles or components. There are two categories of sealants: extrudable/rollable/brushable sealants and sprayable sealants.
- 271     **SELF-PRIMING TOPCOAT:** A topcoat that is applied directly to an uncoated aerospace vehicle or component for purposes of corrosion prevention, environmental protection, and functional fluid resistance. More than one layer of identical coating formulation may be applied to the vehicle or component. The coating is not subsequently topcoated with any other product formulation.
- 272     **SEMIAQUEOUS CLEANING SOLVENT:** A solvent wherein at least 60% of the solvent solution as applied must be water.

- 273 **SILICONE INSULATION MATERIAL:** An insulating material applied to exterior metal surfaces for protection from high temperatures caused by atmospheric friction or engine exhaust. These materials differ from ablative coatings in that they are not "sacrificial."
- 274 **SOLID FILM LUBRICANT:** A very thin coating consisting of a binder system containing as its chief pigment material one or more of the following: molybdenum, graphite, polytetrafluoroethylene (PTFE), or other solids that act as a dry lubricant between faying surfaces.
- 275 **SOLIDS:** The nonvolatile portion of the coating that after drying makes up the dry film.
- 276 **SPACE VEHICLE:** A man-made device, either manned or unmanned, designed for operation beyond earth's atmosphere. This definition includes integral equipment such as models, mock-ups, prototypes, molds, jigs, tooling, hardware jackets, and test coupons. Also included is auxiliary equipment associated with test, transport, and storage that through contamination can compromise the space vehicle performance.
- 277 **SPECIALIZED FUNCTION COATING:** A coating that fulfills extremely specific engineering requirements that are limited in application and are characterized by low volume usage. This category excludes coatings covered in other Specialty Coating categories.
- 278 **SPECIALTY COATING:** A coating that, even though it meets the definition of a primer, topcoat, or self-priming topcoat, has additional performance criteria beyond those of primers, topcoats, and self-priming topcoats for specific applications. These performance criteria may include, but are not limited to, temperature or fire resistance, substrate compatibility, antireflection, temporary protection or marking, sealing, adhesively joining substrates, or enhanced corrosion protection.
- 279 **SPRAY GUN:** A device that atomizes a coating or other material and projects the particulates or other material onto a substrate.
- 280 **STRUCTURAL AUTOCLAVABLE ADHESIVE:** An adhesive used to bond load carrying aerospace components that is cured by heat and pressure in an autoclave.
- 281 **STRUCTURAL NONAUTOCLAVABLE ADHESIVE:** An adhesive cured under ambient conditions that is used to bond load carrying aerospace components or other critical functions, such as nonstructural bonding in the proximity of engines.
- 282 **SURFACE PREPARATION:** The removal of contaminants from the surface of an aerospace vehicle or component or the activation or reactivation of the surface in preparation for the application of a coating.
- 283 **TEMPORARY PROTECTIVE COATING:** A coating applied to provide scratch or corrosion protection during manufacturing, storage, or transportation. Two types include

peelable protective coatings and alkaline removable coatings. These materials are not intended to protect against strong acid or alkaline solutions. Coatings that provide this type of protection from chemical processing are not included in this category.

- 284 **THERMAL CONTROL COATING:** A coating formulated with specific thermal conductive or radiative properties to permit temperature control of the substrate.
- 285 **TOPCOAT:** A coating that is applied over a primer on an aerospace vehicle or component for appearance, identification, camouflage, or protection. Topcoats that are defined as specialty coatings are not included under this definition.
- 286 **TOUCH-UP AND/OR REPAIR OPERATIONS:** That portion of the coating operation that is the incidental application of coating used to cover minor imperfections in the coating finish or to achieve complete coverage. This definition includes out-of-sequence or out-of-cycle coating.
- 287 **VOC COMPOSITE PARTIAL VAPOR PRESSURE:** The sum of the partial pressures of the compounds defined as VOC's and is determined by the following calculation:

$$PP_s = \frac{\sum_{i=1}^n \frac{W_i}{MW_i} \times VP_i}{\frac{W_w}{MW_w} + \frac{W_e}{MW_e} + \sum_{i=1}^n \frac{W_i}{MW_i}}$$

Where:

- $W_i$  = Weight of the "i"th VOC compound, grams.
- $W_w$  = Weight of water, grams.
- $W_e$  = Weight of non-HAP, non-VOC compound, grams.
- $MW_i$  = Molecular weight of the "i"th VOC compound, g/g-mole.
- $MW_w$  = Molecular weight of water, g/g-mole.
- $MW_e$  = Molecular weight of exempt compound, g/g-mole.
- $PP_c$  = VOC composite partial pressure at 20°C, mm Hg.
- $VP_i$  = Vapor pressure of the "i"th VOC compound at 20°C, mm Hg.

- 288 **WATERBORNE (WATER-REDUCIBLE) COATING:** A coating which contains more than 5 percent water by weight as applied in its volatile fraction.

**289 WET FASTENER INSTALLATION COATING:** A primer or sealant applied by dipping, brushing, or daubing to fasteners that are installed before the coating is cured.

**290 WING COATING:** A corrosion-resistant topcoat that is resilient enough to withstand the flexing of the wings.

## SECTION 300 – STANDARDS

**301 LIMITATIONS: VOC EMISSIONS:** No person shall apply any surface coating including any VOC-containing materials added to the original coating supplied by the manufacturer, which contain VOC in excess of the limits in Tables 1a and 1b, unless the emissions are controlled in accordance with the provisions of Section 302 of this rule.

**Table 1A**

<b>PRIMER or TOPCOAT TYPE</b>	<b>VOC LIMITS (g/L)</b>
All Primers (except Specialty or General Aviation Rework Facility Primers)	350 g/l
All Topcoats (except Specialty or General Aviation Rework Facility Topcoats)	420 g/l
General Aviation Rework Facility Primers	540 g/l
General Aviation Rework Facility Topcoats	540 g/l

**Table 1B**

<b>Type of Specialty Coating</b>	<b>VOC Limits (g/L)</b>
Ablative Coating	600
Adhesion Promoter	890
Adhesive Bonding Primers: Cured at 250°F or below	850
Adhesive Bonding Primers: Cured above 250°F	1030
Adhesives: Commercial Interior	760
Adhesives: Cyanoacrylate	1,020
Adhesives: Fuel Tank	620
Adhesives: Nonstructural	360
Adhesives: Rocket Motor Bonding	890
Adhesives: Rubber-based	850
Adhesives: Structural Autoclavable	60
Adhesives: Structural Nonautoclavable	850
Antichafe Coating	660
Bearing Coating Compounds	620
Caulking and Smoothing Compounds	850
Chemical Agent-Resistant Coating	550
Clear Coating	720
Commercial Exterior Aerodynamic Structure Primer	350

**Table 1B**

<b>Type of Specialty Coating</b>	<b>VOC Limits (g/L)</b>
Compatible Substrate Primer	350
Corrosion Prevention Compound	710
Cryogenic Flexible Primer	350
Cryoprotective Coating	600
Coatings Related to Electromagnetism and/or Other Radiation Electric or Radiation-Effect Coating	600
Electrostatic Discharge and Electromagnetic Interference (EMI) Coating	800
Elevated Temperature Skydrol Resistant Commercial Primer	350
Epoxy Polyamide Topcoat	420
Fire-Resistant (Interior) Coating	800
Flexible Primer	350
Flight-Test Coatings: Missile or Single Use Aircraft	420
Flight-Test Coatings: All Other	840
Fuel-Tank Coating	720
High-Temperature Coating	850
Insulation Covering	740
Intermediate Release Coating	750
Lacquer	830
Maskant: Bonding Maskant	420
Maskant: Critical Use and Line Sealer Maskant	420
Maskant: Seal Coat Maskant	420
Metallized Epoxy Coating	740
Mold Release	780
Optical Anti-Reflective Coating	750
Part Marking Coating	850
Pretreatment Coating	780
Rain Erosion-Resistant Coating	420
Resin Surface Sealer	695
Rocket Motor Nozzle Coating	660
Scale Inhibitor	880
Screen Print Ink	840
Sealants: Extrudable/Rollable/Brushable Sealant	240
Sealants: Sprayable Sealant	600
Self-priming Topcoat	420
Silicone Insulation Material	850
Solid Film Lubricant	880
Specialized Function Coating	890
Temporary Protective Coating	250
Thermal Control Coating	800

**Table 1B**

<b>Type of Specialty Coating</b>	<b>VOC Limits (g/L)</b>
Wet Fastener Installation Coating	675
Wing Coating	420

**302 EMISSION CONTROL SYSTEM:** As an alternative to meeting the applicable coating VOC limits set forth in Section 301, an operator can comply with this rule by operating an Emission Control System (ECS) approved by the Control Officer, provided that the control system has a combined VOC emissions capture and control equipment efficiency of at least 81 percent by weight.

**303 REQUIREMENTS FOR AIR POLLUTION CONTROL EQUIPMENT:**

**303.1 Operation and Maintenance (O&M) Plan Required for ECS:**

- a. An owner or operator shall provide and maintain (an) O&M Plan(s) for any ECS, any other emission processing equipment, and any ECS monitoring devices that are used pursuant to this rule or to an air pollution control permit.
- b. The owner or operator shall submit to the Control Officer for approval the O&M Plans of each ECS and each ECS monitoring device that is used pursuant to this rule.
- c. An owner or operator of a facility that is required to have an O&M Plan pursuant to this subsection must fully comply with all O&M Plans that the owner or operator has submitted for approval, but which have not yet been approved, unless notified otherwise by the Control Officer in writing.

**304 APPLICATION EQUIPMENT:** A person shall use one or more of the following application techniques in applying any primer or topcoat to aerospace vehicles or components: flow/curtain coat; dip coat; roll coating; brush coating; cotton-tipped swab application; electrodeposition (DIP) coating; high volume low pressure (HVLP) spraying; electrostatic spray; or other coating application methods that can demonstrate and be approved by the Control Officer as having at least a 65% transfer efficiency, which is equivalent to the transfer efficiency of HVLP or electrostatic spray application methods.

**305 SOLVENT CLEANING:** The following requirements apply to solvent cleaning operations:

**305.1 Hand-Wipe Cleaning:** Cleaning solvents used in hand-wipe cleaning operations shall utilize an aqueous cleaning solvent, or have a VOC composite vapor pressure less than or equal to 45 millimeters of mercury (mm Hg) at 20°C.

**305.2 Flush Cleaning:** For cleaning solvents used in the flush cleaning of parts, assemblies, and coating unit components, the used cleaning solvent (except for semi-aqueous cleaning solvents) must be emptied into an enclosed container or collection

system that is kept closed when not in use or captured with wipers, provided they comply with the VOC handling requirements of Section 307 of this rule.

**305.3 Dip Cleaning:** Dip cleaning using solvents is subject to the requirements of Rule 331.

**306 SPRAY GUN CLEANING:** All spray guns must be cleaned by one or more of the following methods:

**306.1** Enclosed spray gun cleaning system, provided that it is kept closed when not in use and leaks are repaired within 14 days from when the leak is first discovered. If the leak is not repaired by the 15th day after detection, the solvent shall be removed and the enclosed cleaner shall be shut down until the leak is repaired or its use is permanently discontinued;

**306.2** Unatomized discharge of solvent into a waste container that is kept closed when not in use;

**306.3** Disassembly of the spray gun and cleaning in a vat that is kept closed when not in use; or

**306.4** Atomized spray into a waste container that is fitted with a device designed to capture atomized solvent emissions.

**307 VOC CONTAINMENT AND DISPOSAL:** All fresh and used VOC containing material, including but not limited to cleaning solvents, coatings, thinners, rags, and their residues, shall be stored in closed, leak free, legibly labeled containers when not in use. In addition, the owner or operator must implement handling and transfer procedures to minimize spills during filling and transferring the cleaning solvent to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or used cleaning solvents.

**308 EXEMPTIONS:**

**308.1 Coatings:** The following coatings types are exempted from the VOC limits set forth in Tables 1a and 1b in Section 301 of this rule:

- a. Touchup coatings;
- b. Hand-held aerosol can operations;
- c. DOD "classified" coatings;
- d. Coating of space vehicles; and
- e. Low usage coatings used in separate formulations in volumes of less than 50 gallons per year with a maximum exemption of 200 gallons total for such formulations applied annually.

**308.2 Application Equipment:** The following operations are exempt from the requirements of Section 304 of this rule:

- a. Any situation that normally requires the use of an airbrush or an extension on the spray gun to properly reach limited access spaces;
- b. The application of specialty coatings;
- c. The application of coatings that contain fillers that adversely affect atomization with HVLP spray guns and that the permitting agency has determined cannot be applied by any of the application methods;
- d. The application of coatings that normally have a dried film thickness of less than 0.0013 centimeter (0.0005 in.) and that the permitting agency has determined cannot be applied by any of the application methods;
- e. The use of airbrush application methods for stenciling, lettering, and other identification markings; and
- f. Touch-up and repair operations.

**308.3 Solvent Cleaning Operations:** The following are exempt from the requirements of Section 305 of this rule:

- a. Cleaning during the manufacture, assembly, installation, maintenance, or testing of components of breathing oxygen systems that are exposed to the breathing oxygen;
- b. Cleaning during the manufacture, assembly, installation, maintenance, or testing of parts, subassemblies, or assemblies that are exposed to strong oxidizers or reducers (e.g., nitrogen tetroxide, liquid oxygen, hydrazine);
- c. Cleaning and surface activation prior to adhesive bonding;
- d. Cleaning of electronics parts and assemblies containing electronics parts;
- e. Cleaning of aircraft and ground support equipment fluid systems that are exposed to the fluid, including air-to-air heat exchangers and hydraulic fluid systems;
- f. Cleaning of fuel cells, fuel tanks, and confined spaces;
- g. Surface cleaning of solar cells, coated optics, and thermal control surfaces;
- h. Cleaning during fabrication, assembly, installation, and maintenance of upholstery, curtains, carpet, and other textile materials used on the interior of the aircraft;
- i. Cleaning of metallic and nonmetallic materials used in honeycomb cores during the manufacture or maintenance of these cores, and cleaning of the completed cores used in the manufacture of aerospace vehicles or components;



- j. Cleaning of aircraft transparencies, polycarbonate, or glass substrates;
- k. Cleaning and solvent usage associated with research and development, quality control, or laboratory testing;
- l. Cleaning operations using nonflammable liquids conducted within 5 feet of energized electrical systems. Energized electrical systems means any AC or DC electrical circuit on an assembled aircraft once electrical power is connected, including interior passenger and cargo areas, wheel wells and tail sections; and
- m. Cleaning operations identified in an Essential Use Waiver which has been reviewed and approved by the U.S. EPA and the voting parties of the International Montreal Protocol Committee [sections 604(d)(1) and (g)(2) of the Act].

**308.4 General Exemptions:** Cotton-tipped swabs used for very small cleaning operations and aqueous cleaning solvents are exempt from the requirements of Section 307 of this rule.

**308.5 Small Sources:** Sections 301 and 302 of this rule shall not apply to any one facility from which the total VOC emissions from all operations subject to this rule emit less than 15 pounds (6.8 kg) per day and less than two tons (1814 kg) per year of VOCs prior to any controls.

## SECTION 400 – ADMINISTRATIVE REQUIREMENTS

**401 COMPLIANCE SCHEDULE:** All facilities subject to this rule shall meet all applicable provisions of this rule by October 4, 1999. The intention to use an ECS in accordance with Section 302 of this rule shall be announced to the Control Officer in writing by July 6, 1999, and be in use by April 7, 2000.

## SECTION 500 – MONITORING AND RECORDS

**501 RECORDKEEPING AND REPORTING:** Any person subject to this rule shall comply with the following requirements. Records shall be retained for five years and shall be made available to the Control Officer upon request.

**501.1 Coatings:** Each owner or operator using coatings listed in Section 301 of this rule shall maintain a current list of coatings in use, VOC content as applied and records of the monthly usage of such materials in pounds per gallon or grams per liter.

**501.2 Cleaning Solvents:** Each owner or operator shall:

- a. Maintain a current list of all aqueous and semi-aqueous hand-wipe cleaning solvents used with corresponding water contents.
- b. Maintain a current list of all vapor pressure compliant hand-wipe cleaning solvents in use with their respective vapor pressures or, for blended solvents,

VOC composite vapor pressures and records of the monthly usage of such cleaning solvents.

- c. Maintain a current list of all hand-wipe cleaning processes using cleaning solvents with a vapor pressure greater than 45 mm Hg and records of the monthly usage of such cleaning solvents.

**501.3 Enclosed Spray Gun Cleaners:** Any person using an enclosed spray gun cleaner shall visually inspect the seals and all other potential sources of leaks at least once per month while the spray gun cleaner is in operation. Records of these inspections shall be kept and made available upon request by the Control Officer.

**502 COMPLIANCE DETERMINATION:** The test methods for those subparts of 40 CFR Part 60, Appendix A adopted as of July 1, 1998, as listed below, are adopted by reference as indicated. These adoptions by reference include no future editions or amendments. Copies of test methods referenced in subsection 502.1 are available at the Maricopa County Air Quality Department. When more than one test method is permitted for a determination, an exceedance of the limits established in the rule determined by any of the applicable test methods constitutes a violation of this rule.

**502.1 Test Methods:**

- a. **Coatings:** The VOC content of coatings (less water and less non-precursor organic compounds) as applied shall be determined by manufacturer's supplied data or Method 24 of 40 CFR part 60, Appendix A. If there is a discrepancy between the manufacturer's formulation data and the results of the Method 24 analysis, compliance shall be based on the results from the Method 24 analysis. For waterborne (water-reducible) coatings, only manufacturer's supplied data can be used to determine the VOC content of each formulation.
- b. **Control Equipment:** Measurements of VOC emissions from control equipment shall be conducted in accordance with EPA Methods 18, 25, and/or 25A, 40 CFR 60, Appendix A.

**APPENDIX 5:  
RELEVANT ARIZONA REVISED STATUTES**

#### **49-112. County regulation; standards**

A. When authorized by law, a county may adopt a rule, ordinance or regulation that is more stringent than or in addition to a provision of this title or rule adopted by the director or any board or commission authorized to adopt rules pursuant to this title if all of the following requirements are met:

1. The rule, ordinance or regulation is necessary to address a peculiar local condition.
2. There is credible evidence that the rule, ordinance or regulation is either:
  - (a) Necessary to prevent a significant threat to public health or the environment that results from a peculiar local condition and is technically and economically feasible.
  - (b) Required under a federal statute or regulation, or authorized pursuant to an intergovernmental agreement with the federal government to enforce federal statutes or regulations if the county rule, ordinance or regulation is equivalent to federal statutes or regulations.
3. Any fee or tax adopted under the rule, ordinance or regulation does not exceed the reasonable costs of the county to issue and administer the permit or plan approval program.

B. When authorized by law, a county may adopt rules, ordinances or regulations in lieu of a state program that are as stringent as a provision of this title or rule adopted by the director or any board or commission authorized to adopt rules pursuant to this title if the county demonstrates that the cost of obtaining permits or other approvals from the county will approximately equal or be less than the fee or cost of obtaining similar permits or approvals under this title or any rule adopted pursuant to this title. If the state has not adopted a fee or tax for similar permits or approvals, the county may adopt a fee when authorized by law in the rule, ordinance or regulation that does not exceed the reasonable costs of the county to issue and administer that permit or plan approval program.

C. A county that adopts rules, ordinances or regulations pursuant to subsection B of this section and that at any time cannot comply with subsection B of this section shall prepare and file a notice of noncompliance with the director. The county shall post a copy of the notice of noncompliance on the county's website with a date stamp of the date of posting. If the county does not comply with subsection B of this section within one year after posting of the notice on the county's website, the director shall provide written notice to and assert regulatory jurisdiction over those persons and entities subject to the affected county rules, ordinances or regulations.

D. Except as provided in chapter 3, article 3 of this title, before adopting or enforcing any rule, ordinance or regulation pursuant to subsection A or B of this section, the county shall comply with the following requirements:

1. Prepare a notice of proposed rulemaking to include the proposed rule, ordinance or regulation. This notice shall demonstrate evidence of compliance with subsection A or B of this section. The notice shall include the name, address and phone number of a person who can answer questions about the proposed rule, ordinance or regulation and accept any written requests for the county to conduct an oral proceeding. The county shall post the notice on the county's website with a date stamp of the date of posting. The county shall publish the availability of the notice of the proposed rule, ordinance or regulation in a newspaper of general circulation in the county. If there is no newspaper of general circulation in the county, the county shall publish the notice in a newspaper of general circulation in an adjoining county. If requested by the public, the county shall make available a paper copy of the notice at a reasonable cost.

2. For at least thirty days after the posting of the notice of the proposed rule, ordinance or regulation, afford persons the opportunity to submit in writing comments, statements, arguments, data and views on the proposed rule, ordinance or regulation.

3. Respond in writing to the comments submitted pursuant to paragraph 2 of this subsection and post the county's response on the county's website. If requested by the public, the county shall make paper copies of its comments available at a reasonable cost.

4. Schedule a public hearing on the proposed rule, ordinance or regulation if a written request for an oral proceeding is submitted to the county during the thirty-day comment period. The county shall post the notice of oral proceeding on a proposed rule, ordinance or regulation on the county's website. The county shall post the notice of oral proceeding at least twenty days before the date of the oral proceeding. The county shall publish notice of any public hearing required pursuant to this paragraph in any newspaper as prescribed by this title or county ordinance. The county shall select a time and location for the public hearing that affords a reasonable opportunity for the public to participate.

E. A county is not required to comply with subsection D, paragraphs 2, 3 and 4 of this section before it adopts or enforces a rule, ordinance or regulation if the rule, ordinance or regulation only incorporates by reference an existing state or federal rule or law that provides greater regulatory flexibility for regulated parties and otherwise satisfies the requirements prescribed in subsection B of this section.

F. Until June 30, 1995, a person may file with the clerk of the board of supervisors for that county a petition challenging a county rule, ordinance or regulation adopted before July 15, 1994 for compliance with the criteria set forth in subsection A or B of this section. The petition shall contain the grounds for challenging the specific county rule, ordinance or regulation. Within one year after the petition is filed, the board of supervisors shall review the challenged rule, ordinance or regulation and make a written demonstration of compliance with the criteria set forth in subsection A or B of this section and challenged in the petition. Any rules, ordinances or regulations that have been challenged and for which the board of supervisors has not made the written demonstration within one year after the filing of the petition required by this section become unenforceable as of that date. If a county has already made a written demonstration under section 49-479, subsection C, for a rule, ordinance or regulation, the person filing the petition shall state the specific grounds in the petition why that demonstration does not meet the requirements of this section.

G. A rule, ordinance or regulation adopted pursuant to subsection A of this section may not be invalidated subsequent to its adoption on the grounds that the economic feasibility analysis is insufficient or inaccurate if a county makes a good faith effort to comply with the economic feasibility requirement of subsection A, paragraph 2, subdivision (a), of this section and has explained in the written statement, made public pursuant to subsection D of this section, the methodology used to satisfy the economic feasibility requirement.

H. This section shall not apply to any rule, ordinance or regulation adopted by a county pursuant to:

1. Title 36 for which the state has similar statutory or rule making authority in this title.
2. Section 49-391.
3. Chapter 3, article 8 of this title.
4. Chapter 4, article 3 of this title and section 49-765.

5. Nonsubstantive rules relating to the application process that have a de minimis economic effect on regulated parties.

#### **49-474. County control boards**

The board of supervisors of each county may authorize the board of health or health department of their respective counties in cooperation with the department of environmental quality to:

1. Study the problem of air pollution in the county.
2. Study possible effects on adjoining counties.
3. Cooperate with chambers of commerce, industry, agriculture, public officials and all other interested persons or organizations.
4. Hold public hearings if in their discretion such action is necessary.
5. The board of supervisors by resolution may establish an air pollution control district.

#### **49-479. Rules; hearing**

A. The board of supervisors shall adopt such rules as it determines are necessary and feasible to control the release into the atmosphere of air contaminants originating within the territorial limits of the county or multi-county air quality control region in order to control air pollution, which rules, except as provided in subsection C shall contain standards at least equal to or more restrictive than those adopted by the director. In fixing such standards, the board or region shall give consideration but shall not be limited to:

1. The latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on health and welfare which may be expected from the presence of an air pollution agent, or combination of agents in the ambient air, in varying quantities.
2. Atmosphere conditions and the types of air pollution agent or agents which, when present in the atmosphere, may interact with another agent or agents to produce an adverse effect on public health and welfare.
3. Securing, to the greatest degree practicable, the enjoyment of the natural attractions of the state and the comfort and convenience of the inhabitants.

B. No rule may be enacted or amended except after the board of supervisors first holds a public hearing after twenty days' notice of such hearing. The proposed rule, or any proposed amendment of a rule, shall be made available to the public at the time of notice of such hearing.

C. A county may adopt or amend a rule, emission standard, or standard of performance that is as stringent or more stringent than a rule, emission standard or standard of performance for similar sources adopted by the director only if the county complies with the applicable provisions of section 49-112.

D. All rules enacted pursuant to this section shall be made available to the public at a reasonable charge upon request.